Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Chicago Print Date: 3/9/2000

Site Summary Level: Argonne National Laboratory - East HQ ID: 0198

Project CH-ANLEWO-D / ANL-E Waste Operations - Def

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

ANL-E is storing approximately 250 drums, 17 bins and 14 drum equivalents (84 cubic meters) of legacy Transuranic (TRU) waste. It is expected that once it is treated and repackaged, there will be about 350 to 400 drums of TRU waste to be shipped to the Waste Isolation Pilot Plant (WIPP). The current schedule for WIPP disposal requires that this waste be packaged for shipment beginning October 2001.

This PBS for TRU waste identifies activities and costs to support the proper characterization, packaging, certification and verification of the waste stream to meet WIPP acceptance criteria. A subcontract will be utilized via the Carlsbad Area Office (CAO) to obtain the services of a certified (CAO and New Mexico State) vendor known as a Mobile System Vendor to conduct this work at the ANL-E site.

Project Status in FY 2006:

Defense legacy waste disposal will be complete.

Post-2006 Project Scope:

None.

Project End State

Costs for the storage of the TRU waste in Building 331 Shell is included in PBS CH-ANLEWO. Annual storage and maintenance costs for TRU waste are about \$100K per year. These costs would continue irrespective of defense TRU shipments to WIPP because the site will continue to generate and store non-defense TRU waste at a rate of one to two cubic meters per year. Therefore, TRU storage costs are included in PBS CH-ANLEWO, and will be transferred to the Office of Science in FY 2001.

Cost Baseline Comments:

The Mobile system Vendors have demonstrated their capabilities at the Nevada Test Site and have almost completed their certification program on their services. Based upon their performance at NTS, the Mobile vendors have developed a cost range for their services. Through discussions with the Mobile Vendors and the CAO, a preliminary cost estimate has been developed. The cost estimate is \$4.9M. This includes costs for the Mobile Vendor and ANL-E Laboratory support costs. It does not include transporation costs or CAO costs associated with the certification process.

The PBS CH-ANLEWO lifecycle costs include costs for the pre-planning activities to support the development of required project plans for the shipment of the TRU waste to WIPP.

Safety & Health Hazards:

Transuranic (TRU)waste activities at ANL-E include operation of nuclear and radiological facilities, and collection, treatment and storage. The program is an on-going operation and therefore must have continuous appropriate S&H functions necessary to maintain a safe and compliant Waste Operations program. The following are the hazards associated with this program:

Dataset Name: FY 1999 Planning Data Page 1 of 7

Data Source: **EM CDB** Report Number: GEN-01b

Operations/Field Office: Chicago Print Date: 3/9/2000

HQ ID: 0198 Site Summary Level: **Argonne National Laboratory - East**

Project CH-ANLEWO-D / ANL-E Waste Operations - Def

Project Description Narratives

Radiological hazards - Waste Management manages radioactive wastes that can be fissionable and non-fissionable, contact and remoted-handled, low and high contamination radioactive waste.

Chemical Hazards - Waste Management is authorized to collect, treat and store wastes that are corrosive, flammable, reactive, and toxic, which can include liquid corrosive TRU waste.

Industrial hazards - Personnel assigned to Waste Management operate in an industrial setting where they are subjected to normal industrial hazards associated with operating cranes, forklifts, elevators, powertools, diesel operated equipment, and other normal occupational hazards e.g., lifting, tripping, or falls.

Safety & Health Work Performance:

For new or existing nuclear facilities, Operational Readiness Reviews are conducted to ensure a safe facility startup of operations. An ORR was performed on the Mixed Waste Storage Facility and the Radioactive Waste Storage Facility. Changes to facility operations are reviewed through the Unreviewed Safety Question Determination process to ensure that there is an approved authorization basis for the specific operation.

No

The average cost for "S&H " FTE's varies from year to year.

PBS Comments:

Baseline Validation Narrative:

Not yet validated; cost information is based on preliminary estimates.

General PBS Information

Project Validated? Date Validated:

Has Headquarters reviewed and approved project?

Date Project was Added:

Baseline Submission Date: 7/7/1999

FEDPLAN Project? Yes

DNFSB Drivers: CERCLA RCRA AEA UMTRCA State **DOE Orders** Other Y Ν Y Y Ν Y Y Y

Project Identification Information

Page 2 of 7 Dataset Name: FY 1999 Planning Data

Report Number: Data Source: EM CDB GEN-01b

Operations/Field Office: Chicago Print Date: 3/9/2000

Site Summary Level: Argonne National Laboratory - East HQ ID: 0198

Project CH-ANLEWO-D / ANL-E Waste Operations - Def

General PBS Information

DOE Project Manager: Dale Dietzel

DOE Project Manager Phone Number: 630-252-2555 **DOE Project Manager Fax Number:** 630-252-2750

dale.dietzel@ch.doe.gov **DOE Project Manager e-mail address:**

Is this a High Visibility Project (Y/N):

Planning Section

Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006
PBS Baseline (current year dollars)	4,900	0	4,900						0	4,900	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	4,673	0	4,673						0	4,673	0	0	0	0	0
PBS EM Baseline (current year dollars)	4,900	0	4,900						0	4,900	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	4,673	0	4,673						0	4,673	0	0	0	0	0
	2007	2008	2009 201	0 2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current year dollars)	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0

Dataset Name: FY 1999 Planning Data Page 3 of 7

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Chicago Print Date: 3/9/2000

Site Summary Level: Argonne National Laboratory - East HQ ID: 0198

Project CH-ANLEWO-D / ANL-E Waste Operations - Def

	2007	2008	2009	2010				203 030 20				2051- 2055	2056- 2060	2061- 2065	2066 2070
PBS EM Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0 (0 0	0	0	
Baseline Escalatio	n Rates														
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
				2.70%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%		
	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070		
	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%		

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project:

Current Projected End Date of Project: 9/30/2001

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars): Actual 1997 Cost: Actual 1998 Cost:

Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars): 0 Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 0

Project Cost Changes

Cost Adjustments Reconciliation Narratives

Dataset Name: FY 1999 Planning Data Page 4 of 7

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Chicago Print Date: 3/9/2000

Site Summary Level: Argonne National Laboratory - East HQ ID: 0198

Project CH-ANLEWO-D / ANL-E Waste Operations - Def

Project Reconciliation

Cost Change Due to Scope Deletions (-): Cost Reductions Due to Efficiencies (-):

Cost Associated with New Scope (+): 4,673 Added TRU legacy waste

Cost Growth Associated with Scope Previously Reported (+):

Cost Reductions Due to Science & Technology Efficiencies (-):

Subtotal: 4,673

Additional Amount to Reconcile (+): 0

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 4,673

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Initiate Actions Required to Prepare for TRU Waste Shipment	CH-ANLE-WOD-001		10/1/2000								
Legacy TRU Waste Meets WIPP Acceptance Criteria	CH-ANLE-WOD-002		9/30/2001								Y

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Initiate Actions Required to Prepare for TRU Waste Shipment	CH-ANLE-WOD- 001			Y							
Legacy TRU Waste Meets WIPP Acceptance Criteria	CH-ANLE-WOD- 002		Y		Y		1	1	3		Waste is characterized, packaged, certified and verified to meet WIPP acceptance criteria.

Performance Measure Metrics

Category/Subcategory	Units	1997-2006	2007-2070	1997-2070	Actual	Planned	Actual	Planned	Planned	Planned	Planned	Planned	Planned	Planne
		Total	Total	Total	Pre-1997	1997	1997	1998	1999	2000	2001	2002	2003	200

Dataset Name: FY 1999 Planning Data Page 5 of 7

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Chicago Print Date: 3/9/2000

Site Summary Level: Argonne National Laboratory - East HQ ID: 0198

Project CH-ANLEWO-D / ANL-E Waste Operations - Def

Performance Measur	e Metric	s												
Category/Subcategory	Units	1997-2006 Total	2007-2070 Total	1997-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned 2000	Planned 2001	Planned 2002	Planned 2003	Planne 200
TRU														
Treatment	M3	95.32	0.00	95.32							95.32			
TRU														
Storage	M3							0.00	0.00	0.00	95.31	0.00		
TRU														
Ship. to WIPP	M3	95.31	0.00	95.31				0.00	0.00	0.00	0.00	95.31		
Category/Subcategory	Units	Planne 200				Planned 2008	Planned 2009	Planned 2010	Planned 2011 - 2015	2016	2021	- 202		anned 2031 - 2035
TRU														
Treatment TRU	M3													
Storage TRU	M3													
Ship. to WIPP	M3													
Category/Subcategory	Units	Planne 2036 204	2041	2046 -	2051 -	Planned 2056 - 2060	Planned 2061 - 2035	Planned 2066 - 2070	Exceptions	Lifecycle Total				
TRU														
Treatment TRU	M3									95.32				
Storage TRU	M3													
Ship. to WIPP	M3									95.31				

Dataset Name: FY 1999 Planning Data Page 6 of 7

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Chicago Print Date: 3/9/2000

Site Summary Level: Argonne National Laboratory - East HQ ID: 0198

Project CH-ANLEWO-D / ANL-E Waste Operations - Def

Dataset Name: FY 1999 Planning Data Page 7 of 7